iStat/Pro

Touchscreen Thermostat Owner & User Manual

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Old World Craftsmanship...
New World Technology

Your new air conditioning system thermostat has been built using the best components and design philosophy currently available. As a result, if properly installed, iSTAT thermostat will provide you with many years of trouble free comfort.

By taking the time to read and understand these simple instructions you can take advantage of many of the capabilities that are offered in this premium product.

Introduction

The iSTAT thermostat is able to be used as a residential programmable thermostat, a commercial programmable thermostat or as a simple to use manual thermostat. Your installer will have set these modes to best suit your individual needs.

For clarity, this user manual is broken into the following main sections.

- **Residential Programmable Mode.**
- **Commercial Programmable Mode.**
- **Manual Mode.**

Common Functions to all modes.

Please Note:

The iSTAT thermostat can be configured by your installer to a large variety of configurations and functions so that your iSTAT thermostat is perfect for you and your individual needs. As such, this manual may describe a function or feature not active on your thermostat.

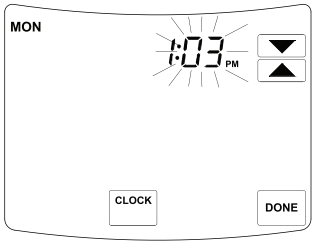
Clean Thermostat Screen

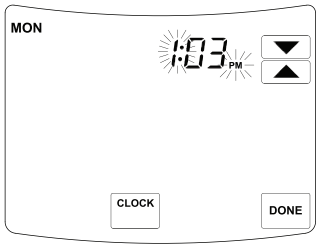
The thermostat has a touch screen interaction. Follow these steps to clean the screen without making thermostat changes:

1. Press the Screen key. Thermostat locks out all touch keys for 30 seconds to allow for cleaning.

2. To cancel the CLEAN SCREEN early, press the Cancel key.

Setting the clock





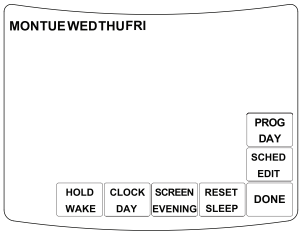
The iSTAT thermostat is fitted with a real time clock. This clock is used by the iSTAT thermostat for the programming functions as described below. It is essential that the clock time and day are set accurately if you require your programmed events to start on time.

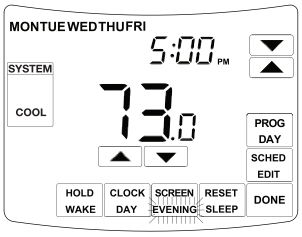
To set the clock, tap the “CLOCK” key. The LCD will show the Hours Digit flashing. Use the up or down key to adjust the hours to the correct time (note the AM / PM symbol). Tap the “CLOCK” key again and now the minute's digits will flash. Adjust this value using the up or down key to show the correct minute. Tap the “CLOCK” key again and now the weekday flashes, again use the up or down key to set this value to the correct day of the week. Tap the “DONE” key again to exit the clock set function.

Your clock is now set.

Residential Programmable Mode

Programming your 4 daily events





The iSTAT is an individual 7-day and 5+2 programmable thermostat. For each day of the week you are able to have 4 timed set temperature changes or programmed events. For clarity these events are conveniently named “WAKE”, “DAY”, “EVENING”&“SLEEP”.

The “WAKE” event may be used to set the temperatures of your home that you would like to wake to.

The “DAY” event is typically used to set the temperatures you wish your home to maintain whilst you are away at work.

The “EVENING” event is often used to set the temperature you wish to be greeted with upon returning home at the end of the day.

The “SLEEP” event can be used to set a comfortable and energy efficient temperature while you sleep. You are permitted to have every event occur at a different time of the day and set a different heating and cooling set temperature for each of the 4 daily events. You are also able to set a heating set point temperature between 41°F to 100 °F. You are able to set a cooling temperature between 32 °F and Cooling OFF (provided your installer has not set control limits that restrict this range of adjustment).

Remember, each of the 4 programmed event set temperatures will hold the home temperature until the next event time arrives where the new event set temperature will then be used. So The “WAKE” event set temperature will be the temperature of your home until the “DAY” event time arrives, then The DAY” event set temperature will be the temperature of your home until the “EVENING” event time arrives, then The “EVENING” event set temperature will be the temperature of your home until the “SLEEP” event time arrives, then The “SLEEP” event set temperature will be the temperature of your home until the next days “WAKE” event time arrives.

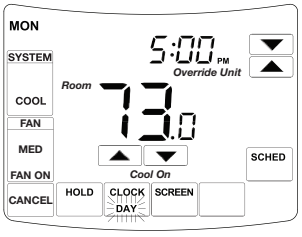
Programming your ISTAT thermostat or setting these daily events is no more complicated than setting the clock as described previously. The same keys are used in the same sequence. The LCD shows only relevant information for the event being adjusted thus reducing possible errors that may be caused by having confusing information displayed on the LCD.

To enter the program mode. Press “SCHED” key. The display will change to show the period day and 4-period. Using the PROG DAY keys adjust the day to the day you wish to start programming or to the day you wish to edit an existing event or program.

Tap the “WAKE”, “DAY”, “EVENING” & “SLEEP” button to select period. Using the “PROG DAY” to select workday or weekend or individual, using the up or down keys to make changes .Use “DONE” key to exit the program set function

Temperature Override

Holds temperature temporarily until the next scheduled period time or until the time the user sets.

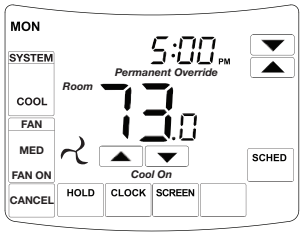


1. Press Up or Down arrow next to the temperature you want to adjust. Hold Temperature until time appears on the screen. The Hold Temperature Until time defaults to the start time of the next scheduled period.
2. Press Up or Down arrow next to the Time key to set desired time for the thermostat to resume
3. Press the Cancel or Sched key to cancel Override Temperature Until and resume schedule.
4. Press Done key.

IMPORTANT

The current day of the week should already be set correctly. If not, see Installer Setup to set the day.

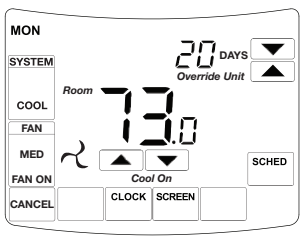
Permanent Program Hold.



Tap the “HOLD” key to override the iSTAT programmed time schedule and hold the currently set temperature. This set temperature will be maintained until released by tapping the “CANCEL” key. The LCD shows the word “P” to confirm the iSTAT time schedule has been held. If desired, while the program is held the current set temperature can be adjusted simply by pressing the up or down keys. The iSTAT thermostat display will change to show the word “SET”, and the active set point for the current mode (Heating or Cooling). As you hold the up or down keys the current set point will change. To Review the set Temperature, simply tap the up or down key to turn the LCD backlight on, tap the up or down key again and now the LCD will change and display the currently set temperature(s).

Vacation Hold

Change temperature setting for a designated number of days.



1. Press the Up and Down arrow keys to set the desired temperature while away on vacation. Notice that - Override Until time is shown on the screen. (This is the time the Vacation Hold override expires after the number of days ends.)
2. Press Hold key twice. Screen shows -“Override Until“ one day.
3. Press Up and Down arrow keys to change the number of Days you desire thermostat to override the schedule.
   NOTE: Days Up and Down arrows appear for approximately seven seconds. Pressing just below Hold Temperature until on the screen allows the Days Up and Down arrows to reappear.
4. To cancel the Vacation Hold override early, press the Cancel key.
   NOTE: When the number of days of Vacation Hold expires, the screen shows Following Schedule to indicate that Vacation Hold has ended.

Commercial Programmable Mode

Programming

Your 2 daily events Commercial programming of the ISTAT has been designed to be an extremely simple and logical process. The ISTAT permits you to program a DAY time for the air conditioning system, then a Stop time for each day of the week. When the ISTAT is displaying “DAY” in the LCD, it will maintain whatever set point has been chosen. When the ISTAT is displaying “EVENING” in the LCD, it will be OFF (or maintain an energy efficient maintenance temperature if set by the installer).

To enter the program mode, press the “SCHED” key. The display will change to show the period day and 2-period.Use PROG DAY button to select Programming Day. Use DAY and EVENING keys to select period. Using the up or down keys set the minute to the time you wish the building air conditioning system to “DAY” for the currently elected day.

After hours Run Timer For convenience

The installer may have set the after hours run function. This function permits you to temporarily turn the iSTAT on for a set period of time, at the conclusion of which the iSTAT will automatically turn back off again. To activate the after hours run timer, simply tap the “HOLD” key.
(Or if fitted, the “After Hours” run key fitted to the remote room temperature sensor.) The LCD will show the word “TIMER” flashing in the LCD. Tapping the “CANCEL” key (or after hours key on the remote sensor) again will cancel any unexpired part of the timer and the iSTAT will switch back off. To Review the set Temperature, simply tap the up or down key to turn the LCD backlight on, tap the up or down key the LCD will change and display the currently set temperature(s).

Manual Mode

To set your desired temperature simply press the up or down keys. The iSTAT thermostat display will change to show the word “SET”, and the active set point for the current mode, (Heating or Cooling) As you hold the up or down keys the current set point will change. If Auto mode is selected, after adjusting the Heat set point wait without touching a key for 3 seconds for the iSTAT thermostat display to change to show “Cool” and “SET” and your current cooling set temperature. If desired change this value with the up or down keys. Use “DONE” key exit this menu. Your new set temperatures will be maintained.

Switching between day and evening set points

The iSTAT will keep two sets of temperature in its memory (if enabled by your installer), typically used for day and night temperatures. This provides you with a quick and simple way to change between your day and evening time set temperatures. Simply tap the “SCHED” key to switch between Day & Evening Modes. Set the Day and separate Evening temperatures as described previously.

Turning your thermostat OFF

To turn your iSTAT Off, simply tap the “SYSTEM” key until the LCD shows the word “OFF”.

To Review the set Temperature.

Simply tap the up or down key to turn the LCD backlight on and now the LCD will change and display the currently set temperature(s).

Common Functions

The Keys Explained

System key

Tap this key to cycle the iSTAT thermostat through the available modes, Heat only, Cool only, Auto season change over mode, Emergency Heat (if fitted), and OFF. (Note - Not all modes may be active on your iSTAT)

NOTE, the installer may have activated the Anti freeze function where your heating system will turn on whenever the room temperature falls below 5 °C (41°F), regardless of the currently selected mode or whether the iSTAT is On or Off.

Hold key

Commercial Programmable Mode.

This key initiates the after hours run timer where, for an installer programmed period the iSTAT will replace the stop program temperatures and temporarily use the start program temperatures to maintain the building temperatures.

Residential Programmable Mode.

The “HOLD” key is used to override the current programs time schedule and to hold the currently set temperature indefinitely. This set temperature will be maintained until released by tapping the “CANCEL” key. Timer will be displayed in the LCD to confirm this function is active.

Temperature up key

Use temperature up key to increase the desired room temperature for the heating or cooling modes, or increase a “value” in programming modes. Also used to force override the preprogrammed temperatures and temporarily replace them with a new higher set temperature.

Temperature down key

Use temperature down key to decrease the desired room temperature for heating or cooling modes, or decrease a “value” in programming modes. Also used to force override the preprogrammed temperatures and temporarily replace them with a new lower set temperature.

Clock key

Tap the “CLOCK” key to begin setting the clock.

Sched key

Press the “SCHED” key to begin programming your daily events. In Manual mode: Tap the “**SCHED**” key to switch between Day & Night modes.

Fan key

Fan Single Speed Fan systems. Tap this key to cycle between Continuous Fan (Fan ON) and Auto Fan. Three Speed Fan systems - Tap this key to cycle between the 7 available fan modes being Low speed, Medium speed, High speed & Auto Fan speeds in auto fan mode and then Low speed, Medium speed, High speed in Fan ON mode. If the iSTAT is OFF, tapping the “FAN” key will turn the fan ON or OFF as desired. If your system has 3 fan speeds these can also be selected by tapping the “FAN” key.

Wake Day Evening Sleep key

Tap this key can select period in programming mode.

Reset key

Tap Reset key to clean filter count.

Prog Day key

Tap this key to select project day in programming mode.

Cancel key

Tap this key to Cancel override mode and setting clock mode and etc.

Done key

Tap this key to finish setting.

Control Modes

Heat Only Mode

The iSTAT thermostat will turn on the Heating mode when the room temperature falls below the Heat set point temperature. In Heat only mode the iSTAT thermostat will NOT bring on the Cooling regardless of the room temperature and the Cooling Set point temperature. In Heat only mode, only the word “Heat” will be displayed in the LCD. When your iSTAT is calling for heat, the word “Heating” will be displayed in the LCD. If the word “Heat” is flashing in the LCD the iSTAT is performing a safety anti cycle delay prior to restating the heating.

E. Heat Mode

The iSTAT thermostat will only use your emergency heating device to maintain your desired heating temperature. This method of heating can be quite expensive therefore it is not recommended to use emergency heat mode unless it is essential. When your air conditioning system is heating using emergency heat, the word “E.Heat” in the LCD will change to the word “E.Heating”.

Cool Only Mode

The iSTAT thermostat will turn on the Cooling when the room temperature rises above the Cool set point. In Cool only mode the iSTAT thermostat will NOT bring on the Heating regardless of the room temperature and Heating set point temperature. In Cool only mode, only the word “Cool” will be displayed in the LCD. When your air conditioning system is cooling, the word “Cool” in the LCD will change to the word “Cooling”. If the word “Cool” is flashing in the LCD the iSTAT is performing a safety anti cycle delay prior to restarting the Cooling.

Auto change Over Mode

The iSTAT thermostat will turn on the Heating if the room temperature falls below the Heat Set point temperature and the Cooling if the room temperature rises above the Cool Set point. This is the recommended mode as it provides automatic control of the air conditioning system to maintain the desired room temperature. Auto changeover mode is indicated by both the words “Heat” & “Cool” in the LCD. If the word “Heat” or “Cool” is flashing in the LCD the iSTAT is performing a safety anti-cycle delay prior to restating the air conditioning system.

Fan Functions Explained

Auto Fan Mode

If the user has selected Auto Fan mode with the “FAN” key the indoor fan will turn on when the heating or cooling turns on, and off again once the heating or cooling turns off. To conserve energy your fan may continue to run momentarily after the heating or cooling has stopped to extract all the warm or cool air still remaining in the air condition system and bringthat conditioned air into the building.

Fan On Mode

Manual Thermostat Mode

Your fan will run continuously.

Residential Programmable Mode

By selecting “Fan On” or continuous fan mode the iSTAT thermostat indoor fan “may” operate continuously between “WAKE” programs and the “SLEEP” programs and then turn on and off as required with heating and cooling outside of those programmed events.

Commercial Programmable Mode

By selecting “Fan On” or continuous fan mode the iSTAT thermostat indoor fan “may” operate continuously between “DAY” programs and the “EVENING” programs and then turn on and off as required with heating and cooling outside of those programmed events.

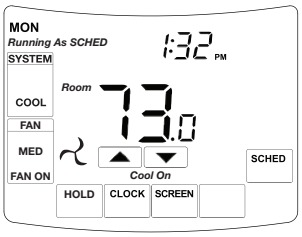
Please Note - Your installer may have activated some of the many advanced indoor fan management capabilities of the iSTAT thermostat that work in partnership with the Fan On Mode. This may result in the fan operating differently than described above. If you find this to be the case and undesirable, please contact your authorized service agent for advice on altering the function.

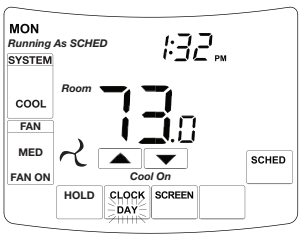
Fan Speeds Single Fan Speed

If your air conditioning system has one fan speed, your iSTAT thermostat will display the fan information shown on the picture below left The words “High”,“Med” or “Low” will be absent from the LCD.Tapping the “FAN” key with permit you to select either “Fan On mode” or “Auto Fan mode” as described above.

Three Fan Speed

If your air conditioning system is fitted with 3 fan speeds your iSTAT thermostat will display the fan speeds as shown on the picturet to the right.Tapping the “FAN” key will step the fan speed selection through “Low”, then “Med(ium)”, then “High” fan and Auto fan speed(indicated by all three fan speeds being shown on the LCD)in auto fan mode, the “Low” “Med”(ium) and “High” in Fan On mode. If auto fan speed has been selected the iSTAT thermostat will indicate the automatically selected fan speed by flashing in appropriate word in the LCD. If Auto Fan Speed has been selected your iSTAT thermostat will automatically select the most appropriate fan speed based on the difference between the room and set temperatures.





LCD Explained

Padlock Symbol.

Whenever this symbol is shown, a control limit has been reached and key or a function has been locked out.

“Spanner” Icon. I

If you see a spanner ICON flashing on your LCD, the installer has left your thermostat in “Commissioning mode”. Although your thermostat will operate your heating and cooling system whilst in “commissioning mode”, all active safety and energy conservations delays have been disabled. It is therefore HIGHLY recommended that you contact your installer and request that the installer mode be disabled.

TEXT “Locked”.

The temperature of the outside air can initiate or prevent certain functions within the iSTAT thermostat control logic. If such a function has been prevented based on the outside air temperature, the word “LOCKED” appears. These functions will automatically “unlock” once the outside air temperature becomes favorable.

TEXT “RENEW FILTER”.

When the “RENEW FILTER” show LCD display,it reminds you to clean or replace your return air filter. Once you have cleaned or replaced your return air filter PRESS RESET keys. The “RENEW FILTER”will disappear and the filter counter will reset back to 000 hours.

TEXT “RECO”.

If the iSTAT Adaptive Recovery mode is active, the iSTAT will pre warm or pre cool your building to ensure your set temperatures are reached by your scheduled event start time. Whenever the iSTAT is performing a pre warming/cooling the word “Recovery” will be shown on the LCD.

Note: Your iSTAT thermostat is capable of many advanced control capabilities, designed to both save energy and improve comfort levels. If any part of the iSTAT display is flashing during normal use, a safety, energy management or program delay/override is in progress. This is normal and is no cause for concern.